

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently amended) A semiconductor integrated circuit device comprising an amplifying circuit for amplifying an analog color video signal outputted from an imaging element, an AD conversion circuit for converting the amplified signal to a digital signal, a differential means for obtaining a difference between the codes of the adjacent pixels in regard to the same color among preceding and succeeding digital signal pixel data after the AD conversion and before outputting to outside of said semiconductor integrated circuit device, and a code conversion means for code conversion of an output of said differential means.

2. (Currently amended) A semiconductor integrated circuit device according to claim 1, wherein said code conversion means is a binary gray code conversion circuit for converting ~~thean~~ an input binary code to ~~thea~~ a gray code.

3. (Currently amended) A semiconductor integrated circuit device according to claim 1, wherein said code conversion means ~~is composed of~~ comprises a circuit for adding or subtracting a fixed value to or from ~~thean~~ an input code.

4. (Currently amended) A semiconductor integrated circuit device according to any one of claims 1 to 3, wherein said differential means ~~is composed of~~ comprises a delay circuit for delaying an output code of said AD conversion circuit and a subtraction means for obtaining a difference between the code delayed by said delay circuit and ~~thean~~ an input code, ~~while~~ said delay circuit ~~is being~~ constructed to vary a delay time depending on the color arrangement of the input video signal.

5. (Currently amended) An imaging system comprising:  
an imaging element provided with a color filter;  
a first semiconductor integrated circuit device including an amplifying circuit for amplifying an analog color video signal outputted from said imaging element, an AD conversion circuit for converting the amplified signal to a digital signal, a differential means for obtaining a

difference between the codes of the adjacent pixels in regard to the same color among preceding and succeeding digital signal pixel data after the AD conversion, and before outputting to outside of said first semiconductor integrated circuit device, and a first code conversion means for converting an output of said differential means; and

a second semiconductor integrated circuit device for image ~~process~~processing including an image processing circuit and a second code conversion means for converting the codes outputted from said first semiconductor integrated circuit device and ~~an image processing circuit.~~

6. (Currently amended) An imaging system according to claim 5, wherein said first code conversion means is a binary gray code conversion circuit for converting thea binary code to thea gray code and said second code conversion means is a gray binary code conversion circuit for converting the gray code into thea binary code.

7. (Currently amended) An imaging system according to claim 5, wherein said first code conversion means ~~is~~ composed of~~comprises~~ a circuit for adding or subtracting a

fixed value to or from an input code and said second code conversion means ~~is composed of~~comprises a circuit for subtracting or adding a fixed value from or to an input code.

8. (Currently amended) An imaging system according to any one of claims 5 to 7, wherein said differential means ~~is composed of~~comprises a delay circuit for delaying an output code of said AD conversion circuit and a subtraction means for obtaining a difference between the code delayed by said delay circuit and ~~the~~an input code, and said delay circuit is constructed to vary a delay time depending on color arrangement of an input video signal.

9. (Currently amended) An imaging system according to any one of claims 5 to 7, wherein a storage means is provided to store a digital video data, said second semiconductor integrated circuit device for image ~~process~~processing is provided with a data compression circuit for compressing the code converted by said second code conversion means and a data expanding circuit for expanding the compressed data, and the data compressed by

said data compression circuit is stored in said storage means.

10. (Currently amended) A signal conversion method for converting an analog color video signal outputted from an imaging element to a digital signal, wherein differential means produces a difference between the codes of the adjacent pixels in regard to the same color among preceding and succeeding digital signal pixel data after the AD conversion of the video signal by the AD conversion circuit, and an output code of said differential means is converted to thea code of less number of bits to be changed over among the preceding and succeeding codes.

11. (Currently amended) An imaging system according to claim 8, wherein a storage means is provided to store a digital video data, said second semiconductor integrated circuit device for image processprocessing is provided with a data compression circuit for compressing the code converted by said second code conversion means and a data expanding circuit for expanding the compressed data, and the data compressed by said data compression circuit is stored in said storage means.